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This Listing of Claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims:

1. (currently amended): A protective overcoat layer for a magnetic recording disc, said protective overcoat layer comprising:

a carbon-containing layer, wherein the carbon-containing layer comprises an F-doped carbon layer; and

a lubricant layer on top of the carbon-containing layer, the lubricant layer having ~~a~~ $\rightarrow\text{CNO}$ an -NCO functional end group.

2. (canceled).

3. (currently amended): The protective overcoat layer of claim 1, wherein the lubricant layer comprises a ~~layer of Z-dise~~ functional perfluoropolyether lubricant having an -NCO functional end group.


4. (original): The protective overcoat layer of claim 1, wherein the carbon-containing layer has thickness less than 20 Å.

5. (currently amended): The protective overcoat layer of claim ~~1~~ 3, wherein the lubricant layer comprises a mixture of ~~Z-dise~~ the functional perfluoropolyether lubricant having an -NCO functional end group and other functional and/or non-functional perfluoropolyether

lubricants, wherein the ~~Z-disee~~ functional perfluoropolyether lubricant having an -NCO functional end group is present in the mixture at a concentration of 1 to 100%.

6. (canceled).

7. (currently amended): The protective overcoat layer of claim 1, wherein the lubricant layer comprises:

 a first layer of lubricant having a ~~a >C=O~~ an -NCO functional end group on top of the carbon-containing layer; and

a second layer of other functional and/or non-functional perfluoropolyether lubricants different from the first layer on top of the first layer.

8. (currently amended): The protective overcoat layer of claim 7, wherein the first layer of lubricant comprises ~~Z-disee~~ a functional perfluoropolyether lubricant having an -NCO functional end group.

9. (original): The protective overcoat layer of claim 7, wherein the first layer of lubricant has a thickness between 1-15 Å, and wherein the second layer of lubricant has a thickness such that a total thickness of the first and second lubricant layers is less than 20 Å.

10. (canceled).

11. (currently amended): A method of protecting a magnetic recording disc including a disc substrate having magnetic recording media thereon, said method comprising:

depositing a carbon-containing layer on the magnetic recording media, wherein the carbon-containing layer comprises an F-doped carbon layer; and

depositing a lubricant layer on the carbon-containing layer, the lubricant layer having ~~a >CNO~~ an -NCO functional end group.

12. (original): The method of claim 11, wherein the carbon-containing layer has a thickness less than 40 Å, and wherein the lubricant layer has a thickness less than 20 Å.

13. (original): The method of claim 11, wherein the carbon-containing layer is deposited on the magnetic recording media by DC magnetron sputtering, RF sputtering, PVD, CVD, PECVD, ion-beam or cathodic arc processes.

14. (original): The method of claim 11, wherein the lubricant layer is deposited on the carbon-containing layer by in-situ or ex-situ dip-lube or vapor lube processes.

15. (canceled).

16. (currently amended): The method of claim 11, wherein the lubricant comprises ~~Z-disee~~ a functional perfluoropolyether lubricant having an -NCO functional end group.

17. (currently amended): The method of claim ~~11~~ 16, wherein the lubricant layer comprises a mixture of ~~Z-dioe~~ the functional perfluoropolyether lubricant having an -NCO functional end group and other functional and/or non-functional perfluoropolyether lubricants, wherein the ~~Z-dioe~~ functional perfluoropolyether lubricant having an -NCO functional end group is present in the mixture at a concentration of 1 to 100%.


18. (canceled).

19. (currently amended): The method of claim 11, wherein the step of depositing a lubricant layer on the carbon-containing layer comprises:

depositing a first layer of lubricant having a ~~>CNO~~ an -NCO functional end group on top of the carbon-containing layer; and

depositing a second layer of other functional and/or non-functional perfluoropolyether lubricants different from the first layer on top of the first lubricant layer.

20. (currently amended): The method of claim 19, wherein the first layer of lubricant comprises ~~Z-dioe, wherein the functional perfluoropolyether lubricants are selected from the group consisting of Z-diae, Z-dol, Z-dol-TX, and Z-tetraol, and wherein the non-functional perfluoropolyether lubricants are selected from the group consisting of Z-15 and Z-25 a~~ functional perfluoropolyether lubricant having an -NCO functional end group.



21. (original): The method of claim 19, wherein the first layer of lubricant has a thickness between 1-15 Å, and wherein the second layer of lubricant has a thickness such that a total thickness of the first and second lubricant layers is less than 20 Å.
